



BiPAC 2300 R2

BPL Access Head-End Unit

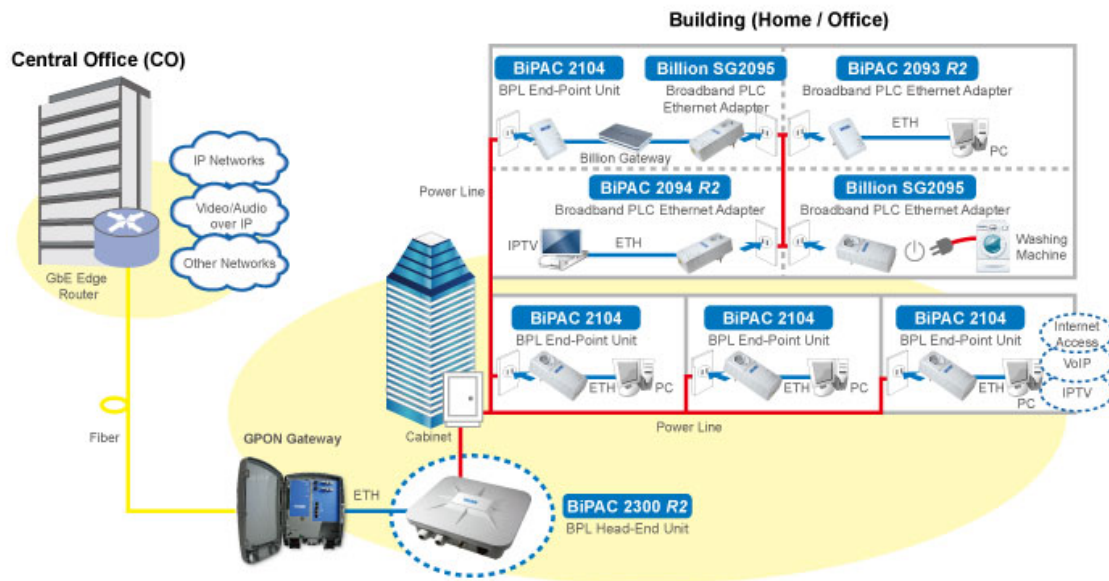
Connects and transfers data over the electric grid from the backhaul to the customer's endpoints

BiPAC 2300 BPL Access Head-End Unit provides a cost-effective means of delivering broadband to a large group of users within one building. The BiPAC 2300 R2 Gateway allows for easy installations in neighborhoods, single and multi-dwelling units (MDUs) where the Head-End Unit acts as a head-end unit, extending an existing internet connection (Fiber, ADSL, Satellite, etc.) over a power line, depending on the customer's requirements and infrastructure.

The Head-End can automatically deliver the broadband connection throughout the whole building via the electrical wiring. It works in even the hardest-to-reach building environment, and enables service providers to quickly and easily bring high-speed broadband access to business and residential customers in multi-dwelling units (MDUs) or multi-tenant buildings. The Head-End Unit allows users to extend an internet connection to a powerline or cable network within an MDU, without the need for installing new wiring. End users can connect their Ethernet enabled devices such as PC's, VoIP phones, Media Centers, etc., using the BiPAC 2104 to create a link to the internet.

- 200Mbps physical connection bandwidth
- 10/100 Mbps Ethernet ports x 2
- AC power: 90-250VAC, 50/60Hz
- Ability to configure as a head-end master or a repeater
- Traffic control and isolation: VLAN/OVLAN
- 802.1D bridging protocol
- Up to 1024 MAC table size for multiple devices
- Up to 32 direct PLC connections
- DES and 3DES encryption
- QoS with 8 level priority queues
- 802.1P traffic priority classification
- Bandwidth limitation for each CPE
- Power mask management
- SNMP and web network management protocol
- Configurable bandwidth from 2 to 34MHz

Application Scenarios



Features & Specifications

Transmission Speed

- 200Mbps max.

Modulation

- Supports OFDM
 - 1536 carriers, 1024 / 256 / 64 / 16 / 8 QAM, QPSK, and BPSK

Frequency Range

- 2MHz ~ 34MHz

Security

- 128-bit/256-bit AES Link Encryption with key management for secure power line communications

Network Management

- SNMP

Quality of Service Control

- Enhancements: contention-free access, eight-level priority based contention access,
- VLAN priority field, IP Field, TCP port Field, UDP port Field Supported

Supported Operating Systems

- Windows 2000 / XP / Vista / 7
- Other 10 / 100 Base-T Ethernet devices

Powerline Encryption

- DES and 3DES encryption

Power Supply Specifications

- Input: 100 ~ 240V AC, 50 ~ 60Hz
- Protection: OCP, OVP, SCP

Interface

- 10/100 Ethernet x2
- Power line port

Hardware Specifications

- AC power plug
- RJ-45 compatible

Physical Specifications

- Dimensions (W,D, H):
270mm x 240mm x 72mm

Operating Environment

- Operating temperature: 0°C ~ 40 °C
- Storage temperature: -20°C ~ 70 °C
- Humidity: 20% ~ 95% non-condensing



BiPAC 2104

BPL Access End-point Unit with Noise-filtering Power Socket

Transform your home power cables into a high-speed computer network

BPL solution is a low-cost, scalable, secure system that integrates broadband networking to deliver high-speed data over existing power lines. It allows users to create a high-speed local area network, without the need for new cabling. By installation of a BPL Head-End Unit, it enables Internet connection through existing power line cable. Users can simply connect the BPL Access End-Point Unit to any electrical socket in their home or office to create a link to the power line network.

Features & Specifications

Transmission Speed

- 200Mbps max.

Modulation

- Supports OFDM
 - 1536 carriers, 1024 / 256 / 64 / 16 / 8 QAM, QPSK, and BPSK

Frequency Range

- 2MHz ~ 34MHz

Security

- 128-bit/256-bit AES Link Encryption with key management for secure power line communications
- Rotating NEK (Network Encryption Key)

Quality of Service Control

- Enhancements: contention-free access, eight-level priority based contention access,
- VLAN priority field, IP Field, TCP port Field, UDP port Field Supported

Operating Systems

- Windows 2000 / XP / Vista / 7
- Other 10 / 100 Base-T Ethernet devices

Power Supply Specifications

- Input: 100 ~ 240V AC, 50 ~ 60Hz
- Protection: OCP, OVP, SCP

Hardware Specifications

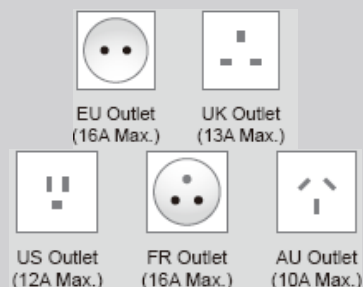
- AC power plug
- RJ-45 compatible
- Sync button
- Reset button
- AC outlet
- LED display:
 - STATUS
 - PLC
 - ETH

Physical Specifications

- Dimensions (W, D, H): 155.2mm x 62mm x 84mm

Operating Environment

- Operating temperature: 0°C ~ 40 °C
- Storage temperature: -20°C ~ 70 °C
- Humidity: 20% ~ 95% non-condensing

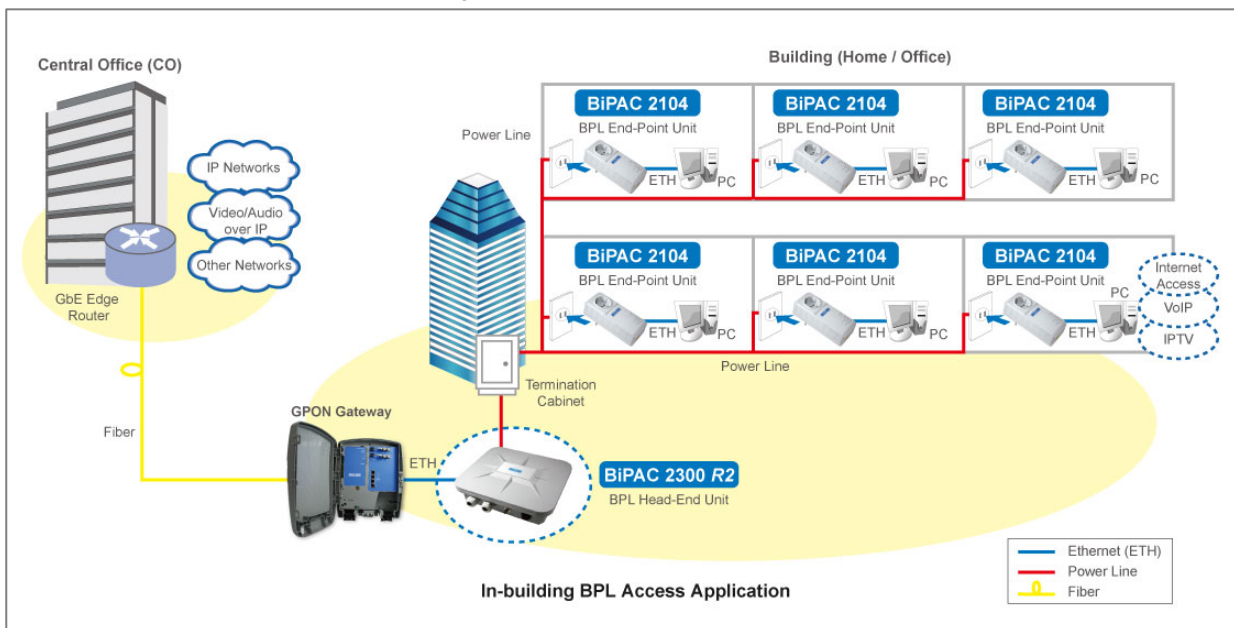


- AC Pass-through power socket with noise-filtering function
- Plugs into a standard AC power outlet to receive Internet signal
- Performs Power line to Ethernet conversion
- Ethernet output connects to a computer or supplies broadband input to a home networking router or gateway
- Maps Ethernet QoS to Power line QoS using VLAN priority
- Bandwidth management for service class differentiation

Application Scenarios

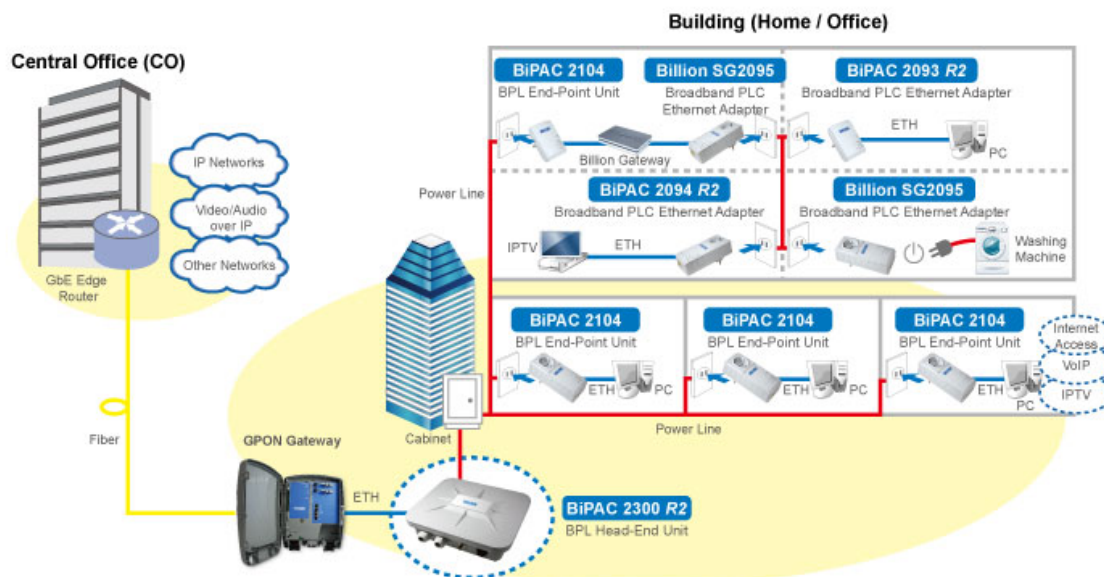
In-Building BPL Access Solution -

BPL Access Head-End Unit (BiPAC 2300 R2) connects to CO side via Fiber network and distributes BPL signals to BPL Access End-Point Unit (BiPAC 2104) through its power cable.



The BPL Access Solution for Multiple Dwelling Building –

The BPL Access Head-End Unit (BiPa2300 R2), located close to the building, supplies the entire network distribution. BPL Access End-Point Unit (BiPAC 2103, BiPAC 2104) connects to the Head-End and provides Internet access simply plug into power outlet.



Note: All the specifications are subject to change without prior notice.
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